



**City of Houston, Texas, Community Rating System (CRS)
Program for Public Information (PPI) and Coverage Improvement Plan (CP)**
August 2016

Table of Contents

Table 1. PPI Committee and Relevant Experience	3
Community Needs Assessment	5
Flood Hazards.....	5
Community Rating System (CRS)	5
Repetitive flooding.....	6
Social and Economic Needs	6
Target Audiences	7
Flood Insurance Assessment (FIA) and Coverage Improvement Plan (CP)	8
Narrative Summary for Level of Coverage.....	8
Table 2. Need-Areas – Low to high policy count density	9
Table 3. General Policy Data	10
Table 4. Pre-FIRM Policy Data	10
Table 5. Post-FIRM Policy Data	11
Table 6. Number of Buildings with Coverage and Insurance in Force	11
Projects and Initiatives.....	12
Table 7. Outreach Project Topics	12
Table 8. PPI Projects and Initiatives	13
Table 9. Outside Public Information Efforts.....	16

Flood Response Preparations	17
Table 10. Flood Response Projects (FRP)	17
Flood Hazards and Development.....	19
Table 11. Topics and Desired Outcomes.....	19
Table 12. CP Projects.....	20
Table 13. Other CRS Public Information Activities.....	20
Recommendations	21
Summary	21
Adoption	21

The City of Houston has developed educational and outreach projects over the years with input and support from community volunteers, numerous area business partners and organizations, and by incorporating innovative methods. The City has also undertaken a community outreach campaign to help residents plan for and protect themselves from flooding and other disasters. This is accomplished through social media, the City website, and a Flood Hazard Awareness letter insert distributed annually in a City-wide Yellow Pages telephone directory.

As part of the City of Houston’s CRS recertification, the City is formally coordinating outreach by developing a Public Information Plan (PPI). The PPI serves as a planning tool to support the City’s outreach efforts and increase CRS points in order to achieve a Class 4 program rating.

The City of Houston currently maintains a CRS Class 5 rating. As part of the City of Houston’s CRS recertification, the City is implementing new CRS activities in conjunction with a program for Public Information (PPI). The PPI will serve as the blueprint for a comprehensive public information program. It includes outreach projects as well as other types of public information endeavors such as a website and technical assistance. The PPI is the basis for the City’s goal to increase the current CRS rating of Class 5 to a Class 4 thereby providing NFIP policyholders in the City of Houston an increased savings from a 25% discount to a 30% discount on annual flood insurance premiums.

Table 1. PPI Committee and Relevant Experience

PPI Committee members include representatives from the Public Works/Engineering Department, Floodplain Management office and Public Information office, as well as citizens and private-sector businesses and organizations. Committee member experience is well-rounded and diverse and includes NFIP compliance, flood insurance, mortgage lending, land development, disaster recovery, flood mitigation, surveying (Elevation Certificates), and public information and outreach.

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The PPI Committee, or, *Committee*, conducted its first meeting on November 10, 2015. Members were provided information regarding CRS and the recertification efforts, along with an assessment of the City's flood-prone areas, number of flood insurance policies in place, repetitive loss structures, and a blueprint for goals and objectives of the Committee. Committee members were provided a list of previous outreach efforts and asked to evaluate and provide input into consideration of current and new outreach activities. The result of the initial meeting was well-received, with meaningful discussion, suggestions, and input regarding additional outreach ideas.

The second Committee meeting was held on November 16, 2015 and a third on December 1, 2015. One objective was to revisit the current list of outreach ideas, and prioritize future outreach projects. The committee agreed that the current outreach program was a generally effective program and offered the following ideas to improve and facilitate better organization and documentation:

- Organize and record activities, including meeting minutes
- Continue to request comments on ways to improve the program from those outside the committee, including residents, area businesses, and stakeholders
- Continue to partner with organizations, community leaders, other City departments to share resources and in an effort to broaden the outreach audience
- Utilize private sector committee members and their strengths in expanding the outreach network

Community Needs Assessment

Houston is the most populous City in Texas and the fourth most populous City in the United States. With a census-estimated 2014 population of 2.239 million people within a land area of 599.6 square miles, it is the largest City in the Southern United States. It is also the principal City of the Greater Houston metropolitan area and the fifth most populated metropolitan area in the United States.

A little more than 40 feet above sea level and about 40 miles from the gulf coast, Houston is naturally prone to flooding and vulnerable to hurricanes. With proximity to the Gulf Coast, its large, growing population, and increased development, floodplain management planning is essential. The City of Houston has implemented a comprehensive Floodplain Management Plan (FMP) that continues to evolve. The FMP officially replaced the flood hazard analysis and projects outlined as part of the City of Houston's Hazard Mitigation Plan (HMAP) when the FMP was adopted in August 2012. As part of the activities outlined in the FMP, an annual progress report is required to be prepared by the City's Floodplain Management Office to document the status of mitigation actions and floodplain management planning in the City of Houston. In addition to managing floodplains locally, the City has worked closely in partnership with the Harris County Flood Control District over many years resulting in watershed studies that document policy, design criteria and other mandates that guide new development and public projects in ways that do not create additional flooding.

The Department of Planning and Development regulates land development in Houston and within its extraterritorial jurisdiction (ETJ). The City of Houston does not have zoning but development is governed by codes that address how property can be subdivided. City codes do not address land use.

The Department checks subdivision plats for the proper subdivision of land and for adequate street or right-of-way, building lines and for compliance with Chapter 42, the City's land development ordinance. Development site plans are checked for compliance with regulations that include parking, tree and shrub requirements, setbacks, and access.

Flood Hazards

Approximately 24.61% of the total City area lies within the Special Flood Hazard Area (SFHA) on FEMA flood maps. Roughly 89,467 building footprints are partially or fully within SFHAs, and account for an estimated 13.88% of the total building footprints in the City.

The City of Houston's Floodplain Management Office (FMO) is part of the City's Department of Public Works and Engineering, Planning and Development Services Division. FMO is responsible for administering the provisions of the City's Floodplain Ordinance. The FMO office provides comprehensive floodplain information to residents, builders, contractors, and other groups.

Community Rating System (CRS)

Through the City's participation in CRS, flood insurance premium rates are discounted to reflect the reduced flood risk resulting from the community actions meeting the three goals of CRS: 1) Reduce flood losses, 2) Facilitate accurate insurance rating, and 3) Promote the awareness of flood insurance. COH entered the CRS program in 2001 at Class 8 and improved its rating to Class 5 in 2009. Houston is one of

only 5 communities in Texas with a Class 5 rating, qualifying residents for a discount of 25% on flood insurance premiums for properties in the Special Flood Hazard Area's (SFHA).

Repetitive flooding

Based on FEMA's current Repetitive Loss report, there are 4,897 repetitive loss properties. Of those properties, 4,020 are unmitigated structures.

In previous years, there were additional structures in the City considered by FEMA to be repetitive loss structures; however, the City, along with the Harris County Flood Control District (HCFCD) has worked with property owners to undertake flood mitigation measures such as buyout, relocation, elevation, or otherwise improving the structures so they are no longer subject to repetitive flood damage.

This analysis concludes that rather than waiting for a flood to occur, a community can protect property from flood damage through a proactive flood protection program that includes various ways to minimize or eliminate flooding.

Social and Economic Needs

The City of Houston has diverse cultural, language, religious and ethnic segments of the population. Of the 2 million-plus residents, 65.6% are Anglo, 17.4% Hispanic, 13.2% Black or African-American, and the remaining a combination of other races.

The demographic composition of the City is an important consideration when overcoming potential obstacles associated with language barriers. Therefore, the Committee recognized that effective and widespread communication is key to effectively distributing messages utilizing the right tools, resources, and venues to best target all residents. The City provides flood information in both English and Spanish on the website in order to reach a more diverse audience.

The Committee also recognized that any message must be repeated and distributed multiple times, and in a variety of different forms. For example, delivering the message to drivers to 'Turn Around, Don't Drown', would be more effective if promoted in multiple ways, such as on highway billboards, through the annual Yellow Pages insert and the local television weather broadcast.

Target Audiences

Target Areas:

The PPI Committee concluded that both the general population as well as specific groups should be targeted for community outreach. The list below represents various target audiences and outreach messages to each segment or group.

Target Audience #1: Community at Large

All residents and businesses throughout the City need to be aware of flood risk, availability of flood insurance, disaster preparedness measures, 'Turn Around, Don't Drown' (TADD), and other key flood information messages. Each year the City works with local telephone service providers to incorporate a flood awareness letter into the Yellow Pages telephone directory. Information covers the 6 topics, provides contact information for the City's FMO, and directs residents to visit the City's website for further information. The phone book is delivered to every valid postal address in the City, ensuring that all mailing addresses within the City will have flood-related outreach information available to them.

Target Audience #2: Special Flood Hazard Areas

Several stakeholder groups have been identified to assist in outreach efforts such as Homeowner Associations (HOA's) in flood-prone neighborhoods, and environmental groups targeting protection of natural floodplains such as the Bayou Preservation Association. SFHAs may also include residents living behind dams, levees, and reservoirs. Outreach will take the form of multiple mailings to all residents within the FEMA-designated SFHA.

Target Audience #3: Repetitive Loss Properties

Citizens living in Repetitive Loss properties and properties within Repetitive Loss areas will receive targeted outreach. Outreach will come in the form of targeted mailing. Repetitive Loss properties and properties within Repetitive Loss areas will receive outreach regardless of their relationship to the SFHA. Outreach material will be sent to all residents of Repetitive Loss areas, all residents near Repetitive Loss areas, and all residents living in Repetitive Loss properties.

Target Audience #4: High Need Areas

High-need areas include areas for which the City receives a high volume of drainage complaints from residents and problem areas that experience minor flooding or ongoing drainage issues outside the SFHA. Areas with a low policy count are also included in this target audience. Residents in these areas will receive outreach messages either through a letter from the mayor or from presentations by the Floodplain Management Office.

Target Audience #5: City Employees

It is critical that during flooding or hurricane events City workers are safe and know alternate routes to travel to the workplace to ensure continuation of essential services for residents. City employees must be informed and educated regarding evacuation routes, shelter-in-place, Turn Around, Don't Drown, and other basic safety and flood risk information. This ensures both the safety of City employees and that current and correct information is being passed along to residents during a disaster.

Flood Insurance Assessment (FIA) and Coverage Improvement Plan (CP)

Narrative Summary for Level of Coverage

In addition to the PPI, further outreach to improve flood insurance coverage in the community is needed. Activity 370 of CRS focuses on improving flood insurance coverage by assessing the current level of flood insurance coverage through a 'Flood Insurance Coverage Assessment' (FIA). Results of the FIA are then incorporated into a 'Coverage Improvement Plan' (CP) to identify where coverage needs to be improved. The CP was developed by the PPI Committee to determine the most effective ways to increase policy count City-wide. Committee members are listed in Table 1 of this document.

The City of Houston has identified specific 'need-areas' for increasing policy count and improving flood insurance coverage. Table 2 shows a ranking of high needs areas based on policy density count. These areas are prioritized highest to lowest for purposes of outreach to specific areas.

The examination of flood insurance policy coverage was based on data provided by FEMA in tabular format. The City received a list of current and historical flood insurance policies. From this tabular format, policy addresses were geocoded in a GIS so that they could be spatially analyzed. Policy counts and parcel counts were aggregated to the need-area level. The City of Houston uses needs areas to direct CIP project funding. Need-areas provide both an appropriate level of analysis for flood insurance policy coverage and an attractive organizational framework for policy coverage improvement efforts. By examining policy count and parcel count, need-areas were ranked in order of policy density (policy count divided by parcel count). This policy density ranking was examined by the Floodplain Management Office for vetting. For example, it would be possible for a need-area to have a very low policy density if it were occupied by a single, large, uninsured agricultural parcel. While policy coverage in this area could be improved, outreach to this particular need-area might not represent the most efficient use of resources. The staff of the FMO provided expert input on the ranking and method of outreach appropriate for each need-area.

Table 2. Need-Areas – Low to high policy count density

Need-Area	H.O.A. / Method of Outreach	Super Neighborhood
M-2015-025	Garden Villas Community	Greater Hobby Area
M-2015-020	Mayor's letter	Central Southwest
M-2015-028	Mayor's letter	Lawndale / Wayside
M-2015-030	Mayor's letter	Greater Hobby Area
M-2015-009	Greater Magnolia Pineview Place Civic Club	Magnolia Park
M-2015-011	Mayor's letter	Astrodome Area
M-2015-027	Mayor's letter	Central Southwest
M-2015-032	South Acres West Civic Club	South Acres / Crestmont Park
M-2015-015	Central City Civic Club	MacGregor
M-2015-018	Langwood II Civic Club	Langwood
M-2015-019	Mayor's letter	Astrodome Area
M-2015-007	MacGregor Trail Civic Club	Greater OST / South Union
M-2015-002	Mayor's letter	Kashmere Gardens
M-2015-014	Mayor's letter	Independence Heights
M-2015-026	Mayor's letter	Sharpstown
M-2015-029	Mayor's letter	Central Southwest
M-2015-004	Westwood Civic Club	Willow Meadows/Willowbend Area
M-2015-024	Mayor's letter	IAH / Airport Area
M-2015-005	Stonehenge Association	Eldridge / West Oaks
M-2015-017	Mayor's letter	East Little York / Homestead
M-2015-021	University Place District	University Place
M-2015-J01	Uptown Houston Association	Greater Uptown
M-2015-022	South MacGregor Civic Club, Inc.	MacGregor
M-2015-006	Northwood Manor	East Little York / Homestead
M-2015-012	Near Northwest Management District	Central Northwest
M-2015-008	South MacGregor Civic Club, Inc.	MacGregor
M-2015-C01	Cottage Grove Civic Club	Washington Avenue Coalition / Memorial Park
M-2015-031	Sagemont Civic Club	South Belt / Ellington
M-2015-001	Freeway Manor Civic Club	Edgebrook Area
M-2015-023	River Oaks Property Owners	Afton Oaks / River Oaks Area
M-2015-013	Southwest Security Association	Meyerland Area
M-410028	Westbury Civic Club, Inc.	Westbury
M-2015-003	Candlelight Forest Civic Club	Greater Inwood
M-2015-010	Mayor's letter	Gulfton

Figure 1. Need Areas for Coverage Improvement

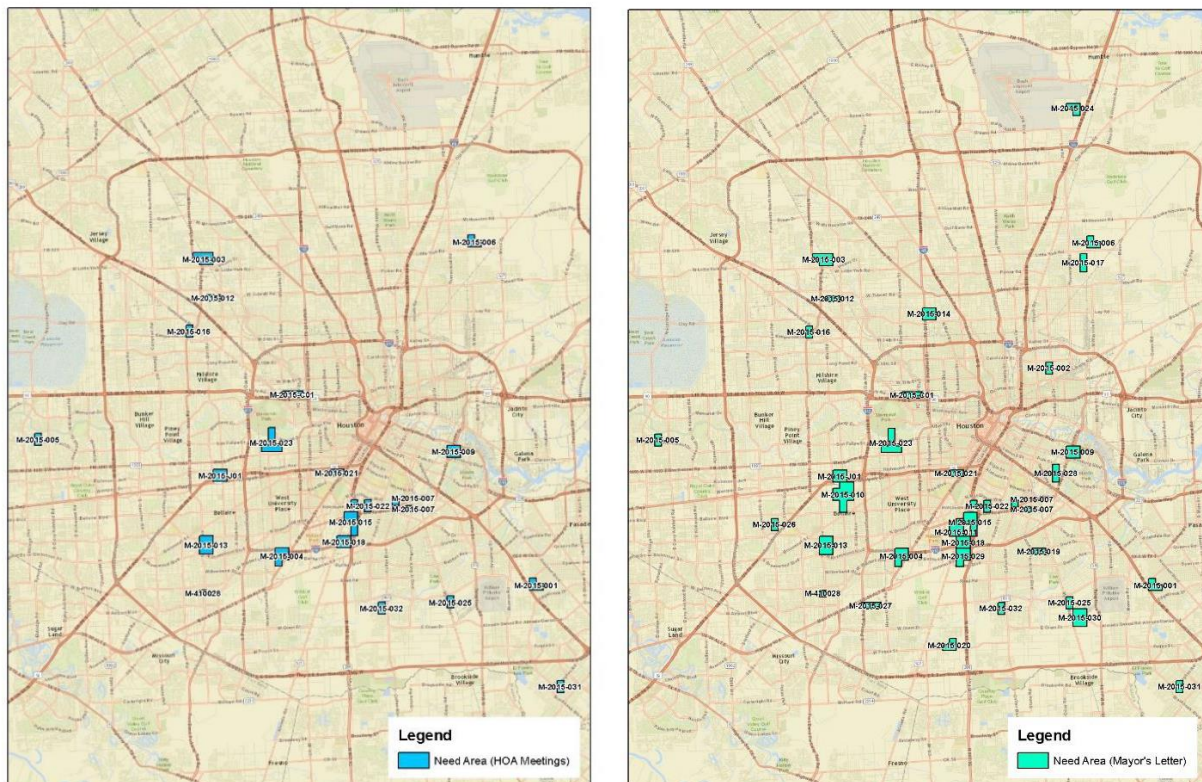


Table 3. General Policy Data

Flood Zone	Policies in Force	Premium	Insurance in Force	Number of Closed Paid Losses	\$\$ of Closed Paid Losses	Adjustment Expense
A	1244	\$1,352,412	\$207,493,400	3,981	\$112,745,230.93	\$3,265,298.29
AE	39,331	\$33,930,074	\$8,483,122,600	12,799	\$579,811,444.41	\$20,066,954.45
X	80,284	\$37,556,814	\$23,241,896,200	21,920	\$598,108,244.48	\$22,895,091.35
Total	120,859	\$1,423,899	\$31,932,512,200	38,700	\$1,290,664,919.82	\$46,227,343

Table 4. Pre-FIRM Policy Data

Flood Zone	Policies in Force	Premium	Insurance in Force	Number of Closed Paid Losses	\$\$ of Closed Paid Losses	Adjustment Expense
A	1,004	\$1,009,510	\$141,721,000	3,830	\$105,539,072	\$3,056,955.42
AE	25,863	\$25,073,107	\$4,941,089,600	11,038	\$510,362,675.50	\$17,577,066.08
X	46,842	\$21,791,569	\$13,032,715	19,174	\$499,982,124.48	\$19,253,637.98
Total	73,709	\$1,056,375	\$5,095,843,315	34,042	\$1,115,883,881	\$39,887,659.48

Table 5. Post-FIRM Policy Data

Flood Zone	Policies in Force	Premium	Insurance in Force	Number of Closed Paid Losses	\$\$ of Closed Paid Losses	Adjustment Expense
A	240	\$342,902	\$65,637,600	224	\$7,189,133.74	\$207,442.89
AE	13,464	\$8,834,008	\$3,541,577,600	1,739	\$68,917,237.65	\$2,469,618.11
X	33,442	\$15,765,245	\$10,209,181,100	2,742	\$98,073,476.71	\$3,640,353.37
Total	47,146	\$24,942,155	\$13,816,396,300	4,705	\$174,179,848.10	\$6,317,414.37

Table 6. Number of Buildings with Coverage and Insurance in Force

Occupancy	Policies in Force	Total Premiums	Insurance in Force
Single Family	101,430	\$53,816,717	\$26,762,967,200
2-4 Family	1,364	\$577,144	\$260,428,400
All Other Residential	12,525	\$6,893,131	\$2,265,255,800
Non Residential	5,675	\$11,635,300	\$2,647,721,000
Total	120,994	\$72,922,292	\$31,936,372,400

Based on information provided by FEMA for general policy data, the vast majority of flood insurance policies are for Zone X properties. The number of flood policies for properties in the low- to moderate flood risk zones are more than double the number of policies for properties located in the Special Flood Hazard Area. Non-residential flood policies total less than 6,000, an indication that the vast majority of businesses and commercial properties are unprotected.

There are almost three times more Zone X flood policies for Post-FIRM structures than there are for Post-FIRM properties located in Zone A and AE. This may be an indication that City of Houston community officials, the Harris County Flood Control District, social media, and other Stakeholders have done a good job educating residents regarding flood risk outside identified Special Flood Hazard Areas. It may also be an indication that many homeowners in the SFHA have paid off their mortgage and are no longer required by the lender to carry flood insurance under NFIP's 'Mandatory Purchase of Flood Insurance' provision.

There are more than 2 million residents living in the City of Houston. Given Houston's flat terrain, proximity to the coast, and historical flooding record, all Houstonians need to be protected by federal flood insurance. With fewer than 121,000 total number of flood policies in force in the City of Houston, the entire community should be considered to "need improvement" in terms of flood insurance coverage. City of Houston officials recognize the need to promote flood insurance in an effort to increase the policy count, protect property, and save lives.

Projects and Initiatives

Table 7. Outreach Project Topics

The PPI Committee selected six priority topics for 2015-2016 that need to be disseminated to audiences. Each topic has a desired, measurable, outcome and related message for all of the identified target audiences. The first six key topics (A-F) are shown in Table 7, below. Two more topics, G and H, were added to the group as initiative projects.

Topic	Outcome	Related CRS Priority Message
A. Know your flood hazard (flood zone, cost of insurance)	Increased flood information inquiries to Public Works	1. Know your flood risk
B. Protect and insure your structure from flood hazards	Increase number of flood policies community-wide	2. You need flood insurance
C. Protect people from the hazard	Reduce number of water rescues, police citations for ignoring barricades	3. Turn around, don't drown
D. Build responsibly	Reduce number of building department citations	4. Construction projects must meet local regulations and water quality rules 5. Educate contractors/builders to meet local flood protection and building regulations
E. Protect property from flooding hazards	Reduced damage and flood insurance claims	6. Build in a manner consistent with local floodplain and building ordinances 7. Keep debris out of the stormwater drainage system
F. Protect natural floodplain functions	Improved water quality and reduced debris removal by City	8. Keep waterways clean
G. <i>Prepare for floods, hurricanes, and other natural hazards</i>	<i>Implement disaster preparedness actions</i>	9. <i>Pre-disaster planning tips</i>
H. <i>Ensure residents are prepared for hurricanes and flooding hazards</i>	<i>Educate public of shelter locations and evacuation routes</i>	10. <i>Plan evacuation routes and know shelter locations</i> 11. <i>Turn around, don't drown</i>

Table 8 of this document provides a comprehensive list of the program elements, which include various public information tasks, website information and other social media efforts. There are 11 projects and initiatives that would be implemented during 2016-2019.

Table 8. PPI Projects and Initiatives**Outreach Projects 2016-2019 (OP)**

OP	Target Audience	#Topics/ Message	Specific Project (Op)	Assignment	Schedule	Stakeholder
1	Community At Large	8 Key Topics / Initiatives (A-H)	Disseminate flood information insert in Yellow Page of phone book	Public Information Office	March each year	Yellow Pages
2	Community At Large	6 Key Topics / Initiatives (A-F)	Update flood brochures and flood information in public library	Update by April	January each year	Public Library
3	SFHA	8 Key Topics / Initiatives (A-H)	First mailing to SFHA residents. This mailing will cover the full eight topics and will be followed up OP8 in August.	Public Information Office	May each year	City Engineering Dept.
4	Community At Large	8 Key Topics / Initiatives(A-H)	Flood information power point presentation to general public at FMO, Homeowners Association meetings, Builder Association, Real Estate groups, civic clubs, etc.	Floodplain Manager, Engineering Staff	5-10 meetings per year at HOA's	City Engineering Dept.
5	Community At Large	6 Key Topics / Initiatives (A-F)	Develop flood video presentation for distribution through various social media outlets and at City of Houston Permitting office.	Floodplain Manager, Engineering Staff	Ongoing	City Engineering Dept.
6	Community at Large	7 Key Topic (A-F)	Attend Greens Bayou Trash Bash to promote 'Adopt-A-Ditch' initiative, 'Keep Houston Beautiful', water quality and storm drain protection	Staff Engineer	Annual Trash Bash Event; March or April each year	City Public Works Dept.
7	Community At Large	6 Key Topics / Initiatives (A-F)	Attend 'Water Week' activities including demonstrating the flood model to area elementary schools	Floodplain Manager, Engineering Staff	Annual Flood Awareness Week each April	City Engineering Dept.

OP	Target Audience	#Topics/ Message	Specific Project (Op)	Assignment	Schedule	Stakeholder
8	SFHAs and Repetitive Loss Properties	6 Key Topics / Initiatives (A-F)	Letter mailed to SFHA and Repetitive Loss property owners	Public Information Office	August each year	City Engineering Dept.
9	Residents in High Needs Areas	6 Key Topics / Initiatives (A-F)	Flood presentations distributed by Homeowners Associations (HOAs)/Environmental groups targeting residents in high-needs areas	Floodplain Manager	HOAs/Environmental assoc. to post flood information on HOA bulletin boards/newsletter to residents; HOAs will post information several times per year	City Engineering/Homeowners Associations/Environmental Assoc.
10	Residents in High Needs Areas	6 Key Topics / Initiatives (A-F)	Letter mailed to high-need areas not part of an HOA	Floodplain Manager	September each year	City Engineering/Homeowners Associations/Environmental Assoc.
11	City Employees	8 Key Topics (A-H)	Educate City employees with accurate flood information to: ensure uniform dissemination of critical flood information for their protection in the event of a disaster, educate the general public, maintain essential City services during and after a flood disaster	Floodplain Manager	One day each month at Employee Training	City Employees
12	Residents in High Need Areas	6 Key Topics / Initiatives (A-F)	Share the flood information video to neighborhoods that participate in the Nextdoor social network (https://nextdoor.com)	Floodplain Manager, Engineering Staff	Ongoing	City Engineering Dept.

The outreach material used in the OPs discusses the eight topics outlined in Table 7. Additionally, the outreach material also includes information on property protection and on-site visits from trained floodplain management personnel. The following excerpt comes from the material used in OP3, though it should be noted that this information is included all OPs:

“In the event of a flood warning, and if time is sufficient, relocate your furniture and belongings to a higher elevation in your home. Place important documents in a dry location and preserve as much drinking water and non-perishable food as possible. To protect your property from future floods, other forms of protection can come in the form of permanent retrofitting of your structure such as elevating your home’s foundation or wet or dry flood proofing you basement. Information about these and other property protection measures are available at all public libraries throughout the city of Houston. You can also call 832-394-8854 to request assistance from a City staff member who can visit you on-site, provide additional guidance on methods of solving your flooding problems, and discuss funding options for mitigating flood risk to your property.”

The protection of drainage systems from performance-reducing foreign objects is an important component of a functional drainage system. Consequently, it is specifically addressed in the OP material. The following excerpt comes from the material used in OP1, though it should be noted that this information is included in all OPs:

“Although the City has a storm sewer and drainage maintenance program, it is impossible to keep all drainage system clear at all times. As a citizen, you can assist by keeping the banks of ditches, streams, and bayous clear of debris. Do not dispose of brush, grass clippings, oil, or other contaminants in storm sewer inlets. The dumping of debris into ditches, streams, or bayous is a major cause of local drainage problems, and is a violation of the Houston Code of Ordinances Section 28-1. To report a violation or a maintenance problem, please call the City’s Service Helpline by dialing 3-1-1.”

Documenting what outside information reaches City of Houston residents is an important component of developing a Public Information program. The program is designed to build community hazard resilience by influencing residents to adopt behaviors that improve water quality, inform flood hazard preparedness, and decrease future flood damage.

Table 9 lists outside initiatives that are in place, or will be expanded upon in support of the goals and CRS messages. This list was composed through the research and knowledge of City staff and PPI Committee members.

Table 9. Outside Public Information Efforts

Organization	Project	Subject Matter	Frequency
Texas Department of Public Safety Emergency Management Office	Disseminate informational/preparedness materials at the Texas Emergency Management Conference	Pre- and post-disaster flood and hurricane topics	April or May each year
City Public Information Office	Facebook and Twitter messages; Website	Post-disaster flood-related topics	As needed
Armand Bayou Nature Center	Disseminate informational materials; outreach presentations to groups	Protect the bayous and natural floodplain functions; watershed and wetland protection	Year-round
Harris County Flood Control District	Website and outreach projects	Flood Protection Programs and FEMA grant program information for flood mitigation projects	Year round
Texas Commission on Environmental Quality	Booth at Flood Awareness Week	Water quality brochures and educational materials	Every April
City Public Works Department	Disseminate informational materials, presentations to residents, different groups	'Only water goes down the drain'; No illegal dumping	Year-round
Local Public Broadcasting Channel 16	Outreach to neighborhoods groups, general public	Be prepared for flooding; purchase flood insurance; post-disaster tips	In conjunction with flood events; annually
Bayou Preservation Association	Citizen science projects, seminars, educational events, festivals	Raise awareness of waterways and their beneficial functions and water quality restoration	October 2016 Symposium
Earth Day Houston	Festival; best practice and education outreach projects	Keep Houston green; preserve our planet	April each year
Texas Floodplain Management Association	Outreach, flood training, flood preparedness	Turn Around, Don't Drown materials; website; elementary school age presentations	Every April; as presentations are requested
Homeowners' Associations (HOA)	Monthly HOA meetings; HOA electronic bulletin boards	Flood preparedness; promote flood insurance; flood mitigation information	COH Floodplain Management office schedule (avg. 10 meetings annually)
City Office of Sustainability	Annual Houston Green Challenge; Citizens Waster Reduction Toolkit; Recycling programs and education	Water quality; reduce contaminants in floodwaters; stormwater and household drains	Year round

Flood Response Preparations

In addition to projects that are implemented every year, the PPI Committee developed pre-flood planning for public information projects that will be implemented during and after a flood. Flood Response Projects (FRP) is a collection of projects prepared in advanced, but not delivered until a flood occurs. These may include materials such as handouts, mailers, press releases, etc. that cover key messages that are disseminated before, during, and after a flood. FRP messages are keyed to the flood and post-flood situation, which are not necessarily the same messages that are needed for OP projects found in the PPI plan. Table 10 includes key FRP projects and messages to City of Houston residents.

Table 10. Flood Response Projects (FRP)

FRP#1: Door hangers placed on flooded homes with key outreach messages.

FRP#2: Website information with post-flood information

FRP#3: Fact sheets with post-flood information handed out at FEMA mobile units and at public meetings in flooded neighborhoods

FRP#4: Flood damage fact sheet distributed post-flood to social media, radio/public broadcasting channels

Community FRP Projects

Topic	Outcome	Project	Assignment	Schedule	Stakeholder
<u>Topic C</u> Protect people From the flood Hazard <u>Message 1:</u> Know when it's safe to return home <u>Message 2:</u> Turn Around, Don't Drown <u>Message 3:</u> Know shelter locations <u>Message 4:</u> Know evacuation routes <u>Message 5:</u> Take safety precautions if home is flooded	Maintain health throughout the cleanup period Avoid preventable accidents in flooded areas Reduce loss of life from crossing flooded roadways	(FRP#1): Door hangers placed on doors in flooded neighborhoods regarding permitting process, flood safety tips, substantial damage, property protection, contact information. (FRP#2): Website information with pre- and post- flood information (FRP#3): Flood Damage Repair Fact Sheet distributed post- flood to residents in flooded areas at FEMA disaster centers, public meetings (FRP#4): Flood Damage Repair Fact Sheet	Floodplain Management Office, Building Inspection Dept.	Pre- and post-flood distribution. Pre-flood Distribution occurs annually Post-flood information in conjunction with, and following, flood event	N/A FEMA Disaster Response Team Public cable channel, radio stations

Topic	Outcome	Project	Assignment	Schedule	Stakeholder
		distributed post-flood to social media			
Topic A: Know your flood risk Message 1: Purchase flood insurance for building/contents/renters Topic D: Protect your property from the flood hazard Topic B: Insure your property Message 2: Purchase flood insurance	Increase inquiries on flood zone, risk Increase in inquiries on mitigating projects/funding options Increase policy count	FRP#1 will contain this information FRP#2 will contain this			N/A
Topic E Rebuild Responsibly Message 1: Get permits before you build Message 2: ICC can help repairs Message 3: Know sub-dam regulations	Increase number of permits, mitigation projects Decrease of structures being repaired without permits Elevate, retrofit flood-prone, rep loss structures	FRP#1 will contain this information FRP#2 will contain this information FRP#3 will contain this information FRP#4 will contain this information			N/A
Topic F Protect natural Floodplain Functions Message 1: Only water goes down household drains and in storm drains	Protect water quality post-flooding and dumping in storm drains	FRP#2 will contain this information	Public Works Dept.		N/A
Topic G: Tips for pre-disaster planning Message 1: Take safety precautions, develop disaster supply kit	Reduce flood-related risk to people	FRP#2 will contain this information	City Emergency Management Office		N/A
Topic H: Know evacuation routes	Expedite moving residents from harm's way	FRP#2 will contain this information	City Emergency Management Office		N/A

Flood Hazards and Development

The City has worked closely with the Harris County Flood Control District to initiate numerous flood mitigation projects and property protection measures to reduce overall flood risk in the Houston metropolitan area. The City has also adopted more stringent building requirements in flood hazard areas and regulates construction and other development within SFHAs to reduce overall flood risk.

Table 11. Topics and Desired Outcomes

Topic*	Outcome	**Message
A. Educate all residents on flood risk, flood zone, and flood insurance availability	Increased flood zone inquiries, increase inquiries for flood insurance availability based on flood zone, risk, and increase policy count city-wide	<ol style="list-style-type: none">1. Know your flood risk2. Flood insurance is the best way to protect your property from flood3. Lenders may require insurance in SFHAs
B. Insure your property for the flood hazard	Increase number of flood policies in SFHAs, city-wide, and in rental areas and other areas prone to flooding	<ol style="list-style-type: none">1. Flood insurance is available by property/casualty agents2. Renters should buy contents coverage3. Property in non-SFHAs also flood and should be protected by flood insurance

Table 12. CP Projects

OP	Target Audience	#Topics / Message	Specific Project (Op)	Assignment	Schedule	Stakeholder
1	High Need Areas	2 Key Topics (know flood risk, purchase flood insurance)	Mayor letter sent to all residents in high need areas, including low policy count areas	Floodplain Manager, Public Information Office	Annual	City Engineering Department
2	SFHA's and Repetitive Loss Properties	6 Key Topics / Initiatives (A-F)	Letter mailed to SFHA and Repetitive Loss property owners with key topic addressing flood insurance availability and promoting purchase of insurance	Public Information Office	Annual mailing	City Engineering Dept.
3	Residents in High Needs Areas	6 Key Topics / Initiatives (A-F)	Flood presentations distributed by Homeowners Associations (HOAs)/Environmental groups encouraging residents in high-needs areas to purchase flood insurance.	Floodplain Manager	HOAs/Environmental assoc. to post flood information on HOA bulletin boards/newsletter to residents	City Engineering, Homeowners Associations, Environmental Assoc.

Table 13. Other CRS Public Information Activities

Element	Activity	Qualify	Credit
350 WEB	Website covers the following additional topics listed in the PPI <ol style="list-style-type: none"> 1. Tips for pre-disaster planning (Topic G in PPI Outreach Projects) 2. Know evacuation routes (Topic H in PPI Outreach Projects) 	Yes	
370 CP	Coverage Improvement Plan <ol style="list-style-type: none"> 1. Know flood risk 2. Purchase flood insurance 	Yes	

Recommendations

Increase outreach to nonresidential and commercial property owners regarding advantages of having a flood insurance policy to protect buildings and contents.

Increase outreach to high-needs areas outside the SFHA in areas prone to drainage issues, minor flooding, and low policy count areas.

In promoting flood insurance in conjunction with outreach projects in the PPI, include a statement regarding the need to purchase and maintain replacement-cost building coverage.

Increase the number of buildings insured in the SFHA.

Increase number of policies for contents coverage community-wide

Increase the number of Preferred Risk Policies in areas of Zone X or shaded Zone X.

Increase flood insurance purchase for residents living behind dams, lakes, levees, or reservoirs

Summary

The City Engineering Department will monitor the PPI Outreach projects as they are developed, document results of outreach efforts, and revise accordingly on an annual basis for maximum benefit from each activity. They will record input from PPI Committee members and suggestions from other City employees and stakeholders participating in the activities. This input will be sent by email to Committee members for consideration and evaluation. An evaluation report will be prepared annually and provided to the City of Houston City Council.

The CP Committee will meet annually to review goals and objectives of the Plan. The Committee will also review the outcome of each individual activity to modify, add, delete, and approve items, and revise CP projects accordingly. The outcomes and revisions will be submitted as part of the City's annual recertification to the Community Rating System.

Adoption

This document will become effective upon adoption by the City Council.

August 2016

A final draft of this document was sent to Mark Lujan at FEMA Region 6 for review on 08/16/2016.